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• FARM and
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• EQUIPMENT

facts

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4th Edition

FARM AND INDUSTRIAL EQUIPMENT INDUSTRY FACTS BOOK

The Farm and Industrial Equipment Institute compiles and publishes this book to provide a reference and authoritative source of information about the farm and industrial equipment industry. The first edition of the Facts Book was published in 1958 with subsequent editions in 1959 and 1961. The percentage indexes in these earlier editions were based on "1947-1949 = 100%" and are therefore incompatible with the percentage indexes in the present (1966) edition where "1957-1959 = 100%." The 1958 and 1959 editions, however, contained tables which in some cases dated from 1910 or 1920 and are, therefore, valuable sources for material not easily found elsewhere.

Manufacturers in this industry number 912, having 945 plants and employing 119,000. The products reported in this book include tractors for farm and nonfarm use, machines for tilling, planting, cultivating, spraying, harvesting, and equipment for farmstead mechanization for dairies, poultry and other such operations. Equipment such as pick-up trucks, aircraft for crop dusting or other products not primarily designed for farm use have not been included in our reports.

The FIEI Facts Book contains also information on industrial equipment, which has been defined as "equipment used to increase efficiency for earthmoving, materials handling, landscaping, and street and highway maintenance jobs." This equipment is produced by many of the manufacturers of farm equipment and the available statistics are collected by the Farm and Industrial Equipment Institute.

Layout and organization of this latest revision represents a great deal of work on the part of L. C. Blunt (International Harvester, ret.) who cooperated closely with Robert T. Glidden, for many years chairman of the FIEI Statistics Committee, to improve the format and usability of the book. We recognize a debt of gratitude to both of these gentlemen.

While we are sure that you will find the book useful, we want you to know that we expect to continue expanding and refining its information in future editions. The next edition will carry a substantial body of information gathered in the 1964 Census of Agriculture. Had this information been available it would have been included in the present edition.

Your comments and suggestions for future editions are solicited.

Douglas Hewitt
Executive Secretary
Farm and Industrial Equipment Institute
410 N. Michigan Ave., Chicago, Ill. 60611
March 1966

CONTENTS

	Page
Employment, Hourly and Weekly Earnings	4
Value Added By Manufacture	4
Value of Shipments - North America	5
Production and Shipments	6-7
Horsepower Shipped - Total and Average Per Tractor	7
Retail Sales of Wheel Tractors by States - 1962-1964	8
Retail Sales of Wheel Tractors by H.P. - 1962-1964	9
Number of Farm Equipment Dealers - U.S. and Canada	9
Manufacturers' Shipments of Farm Machines - Units	10-13
Value of Manufacturers' Shipments	14-15
Trends in Tractor Shipments by Types of Fuel	16
Crawler Tractor Production and Shipments	17
Garden Tractors - Shipments	18
Industrial Wheel and Crawler Tractors - Shipments	19
Industrial Equipment for Mounting on Tractors - Shipments	20-21
Gross Income and Capital Expenditures	22
Trends in Acreage, Yields and Production Efficiency	23
Trends in Productivity and Horsepower Per Farm	24
Production Assets Used in Agriculture	25
Farm Implement and Equipment Sales (Canada)	26-29
Dealer Sales to Users - 1964 (Canada)	30
Population of Specified Machines on Farms (Canada)	31

U.S. EMPLOYMENT, HOURS & EARNINGS IN FARM MACHINERY & EQUIPMENT MANUFACTURING INDUSTRY

	All Employees (in thousands)	Production and Related Workers			
		Number (in thousands)	Average Weekly Earnings (dollars)	Average Hourly Earnings (dollars)	Average Weekly Hours
1958	112.7	81.5	$ 93.50	$2.32	40.3
1959	122.3	88.8	99.47	2.45	40.6
1960	112.3	78.4	99.05	2.47	40.1
1961	108.8	76.2	102.66	2.56	40.1
1962	112.3	80.4	107.59	2.65	40.6
1963	118.9	86.1	111.93	2.75	40.7
1964	124.2	90.4	118.40	2.86	41.4

Source: U. S. Department of Labor

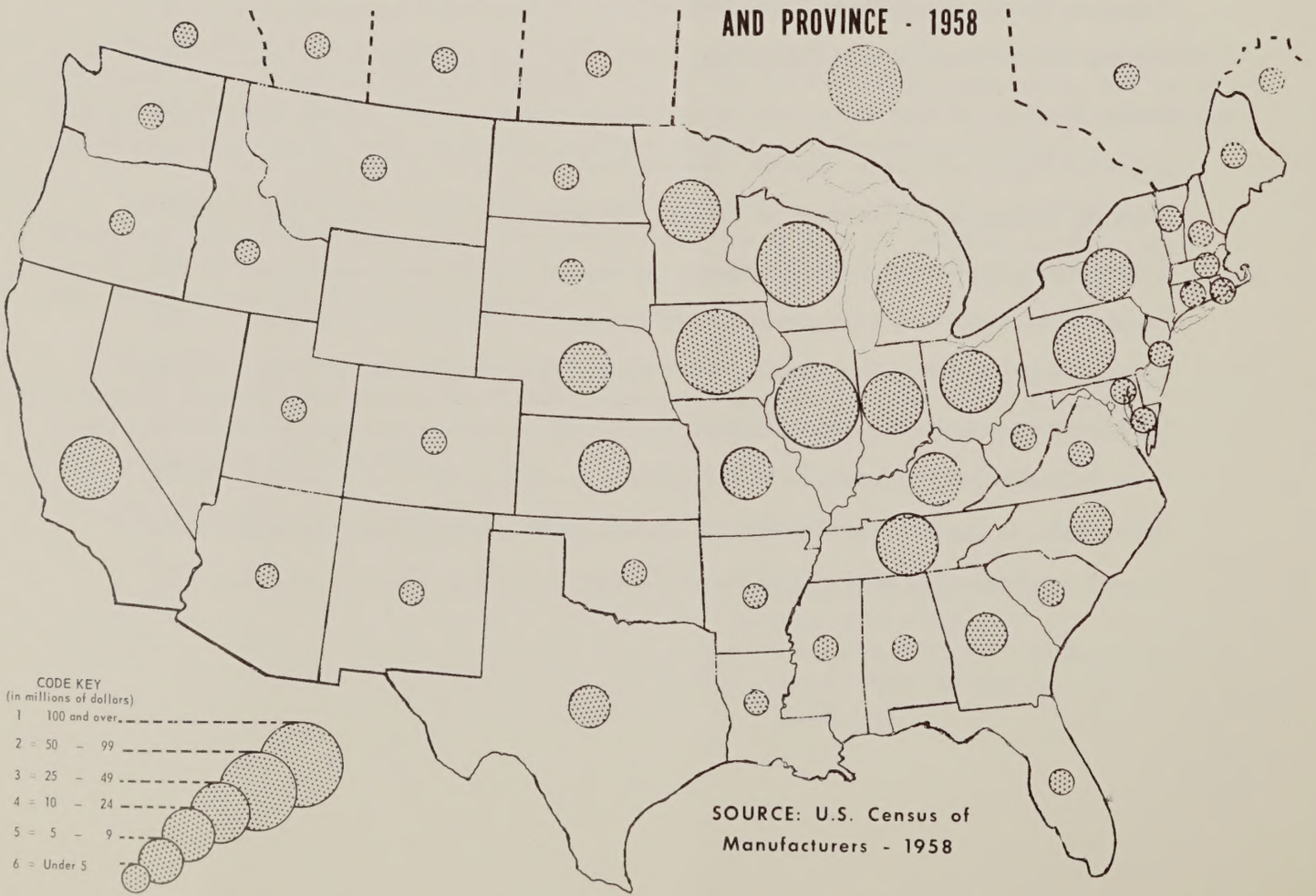
NUMBER OF MANUFACTURERS OF FARM MACHINES AND EQUIPMENT IN NORTH AMERICA

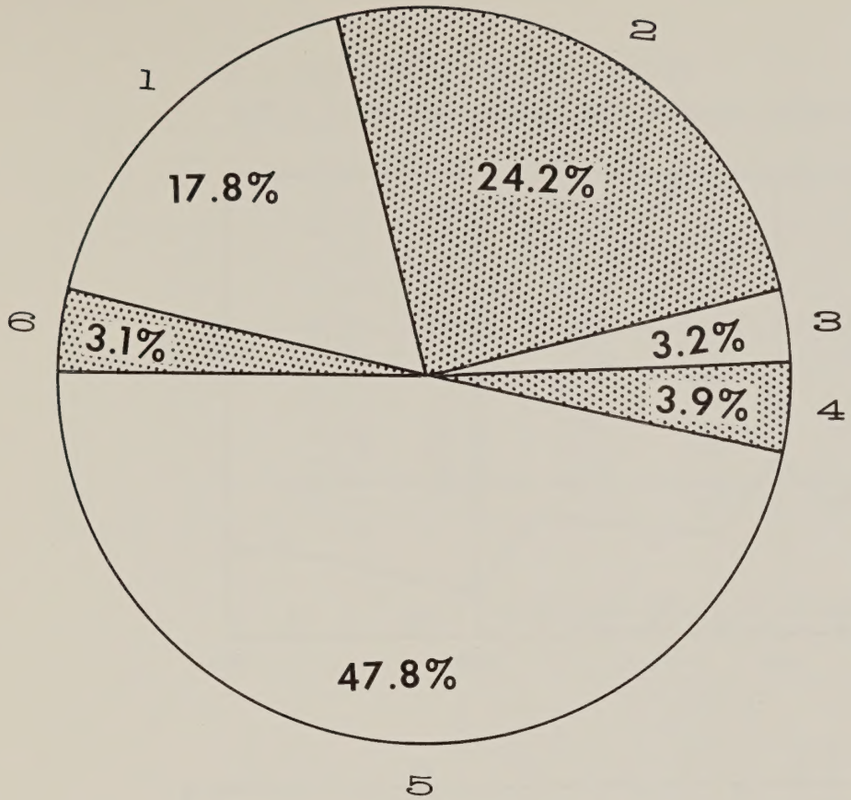
(Includes tractors and attachments for tractors, for either farm or industrial use in Canada and the U.S.)

Year	Number of Manufacturers	
	U.S.	Canada
1929		62
1935	874	40
1937	1,015	37
1944	1,156	39
1955	1,245	77
1956	1,125	71
1957	1,097	64
1958	1,062	63
1959	1,026	64
1960	986	69
1961	943	67
1962	911	70
1963	885	NA
1964	912	NA

Source: U.S. Bureau of the Census MA35A
Dominion Bureau of Statistics, Catalog 42-202.

FARM MACHINERY AND EQUIPMENT VALUE ADDED BY MANUFACTURE BY STATE AND PROVINCE - 1958





U.S. FARM EQUIPMENT INDUSTRY, 1964

RELATIVE DOLLAR VALUE OF MANUFACTURERS' SHIPMENTS FOR MARKET SEGMENTS

1. Machines for pre-harvest operations:
   - Planting, seeding and fertilizing machinery.
   - Harrows, rollers, pulverizers and stalk cutters.
   - Plows and listers.
   - Sprayers and dusters.
   - Cultivators and weeders.
2. Haying and harvesting machines:
   - Harvesting machinery.
   - Haying machinery
   - Machines for preparing crops for market or use.
3. Farm transportation and material handling
   - Farm elevators and blowers.
   - Farm wagons, trucks, and other farm transportation equipment.
4. Barn and barnyard equipment.
   - Farm poultry equipment.
   - Hog equipment
   - Other barn and barnyard equipment
5. Tractors
   - Farm use - domestic.
   - Non-farm use - domestic.
   - Tractors for export.
6. Garden tractors and motor tillers. Includes wheel and tracklaying garden type.

VALUE OF SHIPMENTS OF THE FARM EQUIPMENT INDUSTRY
NORTH AMERICA

($000,000 omitted)

Year	Total Industry Shipments	U. S. Manufacturers' Shipments*			Canadian Manufacturers' Shipments*
		U.S. Total	Farm Machines & Equipment (Except Tractors)	Wheel Tractors	
1946	$ 867	$ 813	$ 534	$279	$ 54
1947	1,317	1,233	758	475	84
1948	1,789	1,650	991	659	139
1949	1,891	1,721	998	723	170
1950	1,824	1,682	1,002	680	142
1951	2,256	2,094	1,219	875	162
1952	1,978	1,783	1,104	679	195
1953	1,828	1,668	1,003	665	160
1954	1,505	1,392	883	509	113
1955	1,663	1,553	912	641	110
1956	1,500	1,382	854	528	118
1957	1,583	1,465	896	569	118
1958	1,862	1,733	1,075	658	129
1959	2,020	1,868	1,130**	738	152
1960	1,653	1,512	1,001**	511	141
1961	1,725	1,604	1,002**	602	121
1962	1,848	1,725	1,047**	676	123
1963		1,957	1,186**	771	
1964		2,110	1,287**	823	

* Includes domestic and export shipments of complete units, attachments and repair parts at prices paid by wholesalers, f.o.b. factory.

Excludes garden tractors, crawler tractors, industrial and other related equipment used in agriculture but which in part constitute segments of the Farm Equipment Industry.

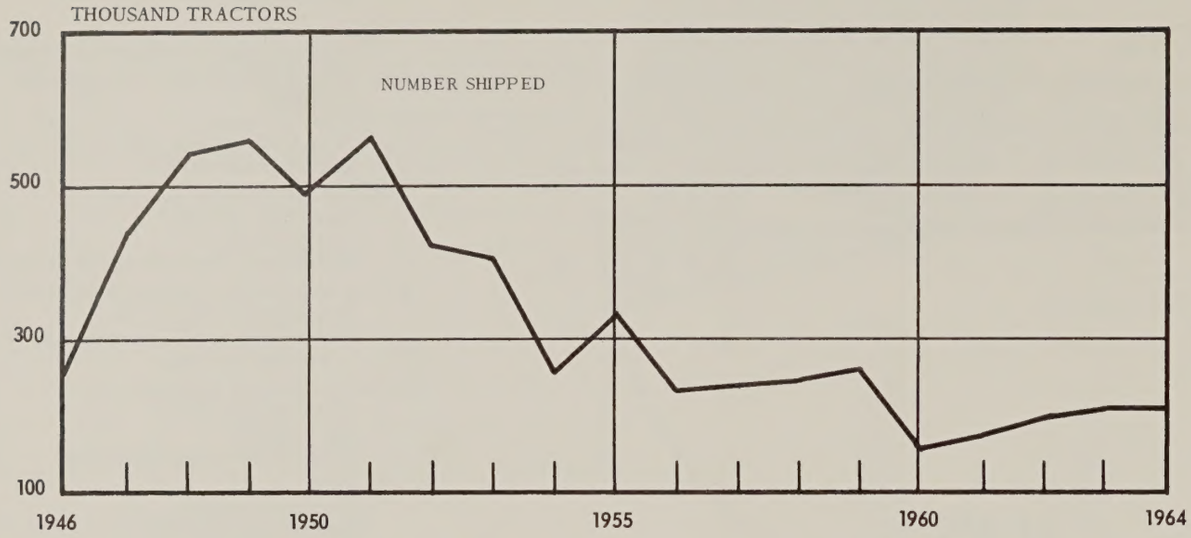
Source: U. S. Bureau of the Census Series MA35A and MA35S and Dominion Bureau of Statistics Catalog 42-202.

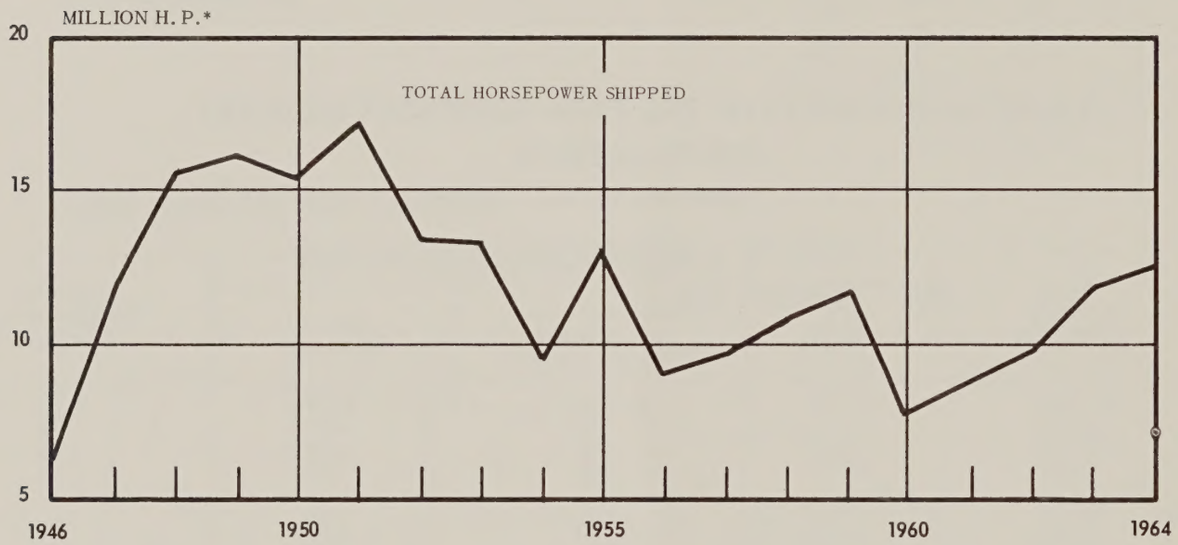
Canadian dollars unadjusted for exchange fluctuation.

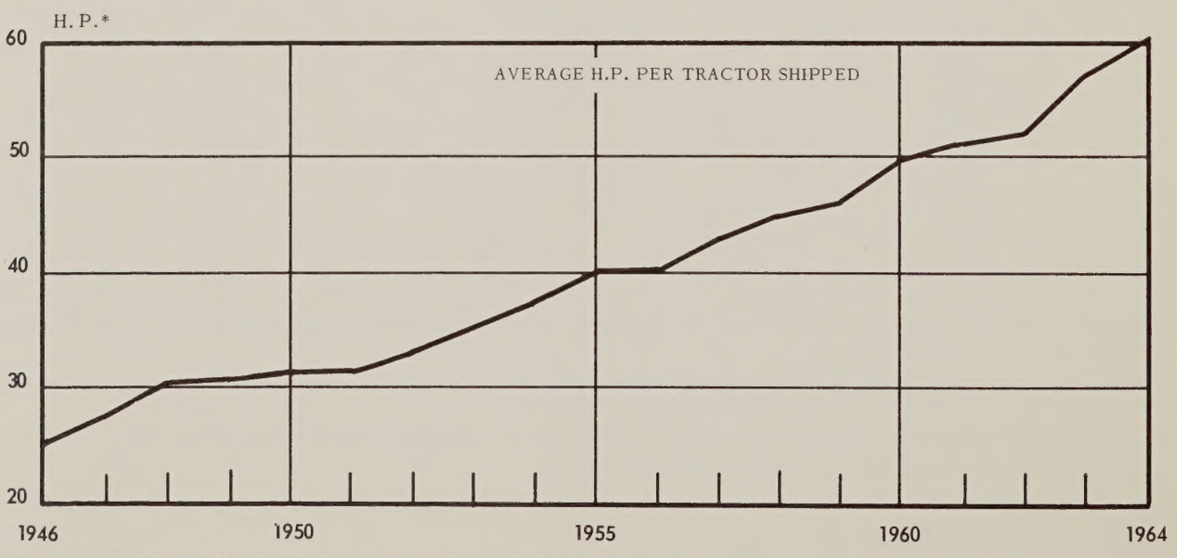
Values shown are approximately 80 percent of those paid by dealers to manufacturers or distributors.

** See chart and table on page 14 for details.

WHEEL TRACTORS SHIPPED BY U.S. MANUFACTURERS, 1946 - 1964







*CORRECTED MAXIMUM BELT OR P.T.O. HORSEPOWER

U. S. PRODUCTION AND SHIPMENTS OF WHEEL TRACTORS – UNITS 1940-1964

Year	U. S. Production	U. S. Manufacturers' Shipments			U. S. Imports	Total Shipments to the U. S. Market
		Total	Domestic	Export		
1940	249,434	249,921	215,701	34,220	30	215,731
1945	244,430	243,692	186,281	57,411	101	186,382
1950	496,651	497,852	424,398	73,454	7,134	431,532
1955	330,141	326,437	286,160	40,277	8,759	294,919
1956	214,654	222,581	190,909	31,672	7,681	198,590
1957	229,050	231,061	203,701	27,360	6,700	210,401
1958	241,269	239,161	215,961	23,200	6,449	222,410
1959	259,916	252,317	226,788	25,529	13,201	239,989
1960	152,187	156,041	137,184	18,857	15,500	152,684
1961	171,417	171,759	153,230	18,529	8,330	161,560
1962	188,101	189,705	169,429	20,276	10,961	180,390
1963	203,449	204,970	177,239	27,731	12,669	189,908
1964	213,221	204,210	169,827	34,383	8,805	178,632

Source: U. S. Bureau of the Census

U.S. EXPORTS OF TRACTORS, FARM MACHINES AND EQUIPMENT

Wholesale prices with $ 000 omitted

Year	Exports (1)			Exports in terms of 1957-59 prices		
	Tractors, parts & accessories (2)	Agricultural machines, equipment, parts & accessories	Total exports	Index of wholesale prices agricultural machinery, inc. tractors (3)	Value	Index
1940	56,133	20,746	76,879	49.9	154,066	31.9
1945	132,317	31,036	163,353	52.5	311,149	64.5
1950	244,576	108,583	353,159	79.8	442,555	91.7
1955	345,261	122,556	467,817	88.9	526,228	109.1
1956	389,886	126,416	516,302	92.0	561,198	116.3
1957	379,816	132,765	512,581	96.3	532,275	110.3
1958	310,732	123,139	433,871	100.3	432,573	89.7
1959	354,836	143,871	498,707	103.4	482,309	100.0
1960	387,141	145,005	532,146	105.4	504,882	104.7
1961	359,331	143,689	503,020	107.4	468,361	97.1
1962	362,663	158,020	520,683	109.5	475,509	98.5
1963	421,923	183,375	605,298	111.1	544,822	112.9
1964	596,872	175,820	772,692	112.9	684,403	141.8

(1) Compiled from statistics published by the Bureau of the Census, Department of Commerce. Values reported in export statistics represent the selling price, or cost if not sold, including inland freight insurance, and other charges to the U. S. port of exportation.

(2) The Bureau of the Census figures include some used tractors but do not include the industrial tractors which are used principally around stations, warehouses, and factories. Prior to January 1, 1949, contractors' off-highway wheel-type tractors were included in the tractor export figures.

(3) U. S. Department of Labor.

H.P. OF FARM AND NONFARM WHEEL TRACTORS – U.S. SHIPMENTS

Year	Wheel Tractors Shipped	Total Horsepower Shipped[1]	Average H.P. Per Tractor Shipped
	(000)	(000)	(H.P.)[2]
1946	255	6,354	25
1950	498	15,445	31
1955	326	12,976	40
1956	223	8,986	40
1957	231	9,821	43
1958	239	10,806	45
1959	252	11,628	46
1960	156	7,657	49
1961	172	8,761	51
1962	190	9,890	52
1963	204	11,843	58
1964	204	12,495	61

1 Number of tractors shipped per horsepower rating group multiplied by median horsepower of group 1946-1962. Beginning 1963 manufacturers reported total horsepower.
2 Corrected maximum belt or p.t.o. horsepower.

Source: Basic data from U. S. Bureau of the Census M35S.

RETAIL SALES OF WHEEL TRACTORS IN THE UNITED STATES – UNITS

United States-Made and Imported Wheel Tractors by End Use – January - December 1962, 1963 and 1964

	1962			1963			1964		
	Farm	Nonfarm	Total	Farm	Nonfarm	Total	Farm	Nonfarm	Total
New England									
Maine	293	158	451	258	157	415	344	180	524
New Hampshire	117	100	217	125	73	198	123	89	212
Vermont	352	61	413	375	72	447	354	70	424
Massachusetts	301	597	898	304	636	940	316	645	961
Rhode Island	39	71	110	29	80	109	27	85	112
Connecticut	152	255	407	187	321	508	217	401	618
	1,254	1,242	2,496	1,278	1,339	2,617	1,381	1,470	2,851
Middle Atlantic									
New York	3,127	1,720	4,847	3,359	1,885	5,244	3,493	1,772	5,265
New Jersey	568	769	1,337	613	852	1,465	561	901	1,462
Pennsylvania	3,094	1,418	4,512	3,142	1,344	4,486	3,201	1,540	4,741
	6,789	3,907	10,696	7,114	4,081	11,195	7,255	4,213	11,468
East North Central									
Ohio	5,303	1,456	6,759	5,745	1,554	7,299	5,984	1,785	7,769
Indiana	5,681	746	6,427	6,282	866	7,148	7,014	1,252	8,266
Illinois	10,427	1,630	12,057	10,667	1,748	12,415	11,739	1,801	13,540
Wisconsin	5,120	553	5,673	4,493	579	5,072	4,413	644	5,057
Michigan	4,304	936	5,240	4,773	1,293	6,066	5,066	1,503	6,569
	30,835	5,321	36,156	31,960	6,040	38,000	34,216	6,985	41,201
West North Central									
Minnesota	6,310	561	6,871	5,970	477	6,447	5,823	494	6,317
Iowa	10,411	655	11,066	8,930	661	9,591	8,765	634	9,399
Missouri	5,895	762	6,657	5,875	714	6,589	5,704	998	6,702
North Dakota	2,869	119	2,988	3,744	175	3,919	3,992	165	4,157
South Dakota	3,171	217	3,388	3,037	203	3,240	2,717	185	2,902
Nebraska	5,461	352	5,813	5,438	359	5,797	4,536	368	4,904
Kansas	6,238	440	6,678	5,492	514	6,006	5,221	558	5,773
	40,355	3,106	43,461	38,486	3,103	41,589	36,758	3,402	40,160
South Atlantic									
Delaware	331	85	416	313	60	373	320	78	398
Maryland	1,128	450	1,578	1,274	428	1,702	1,216	521	1,737
Virginia	3,370	623	3,993	3,035	736	3,761	2,784	823	3,607
West Virginia	697	267	964	671	197	868	697	205	902
North Carolina	6,483	795	7,278	6,459	718	7,177	6,105	854	6,959
South Carolina	2,546	427	2,973	2,624	464	3,088	2,525	437	2,962
Georgia	4,895	874	5,769	5,438	989	6,427	5,238	1,034	6,272
Florida	2,422	858	3,280	2,928	1,033	3,961	3,081	896	3,977
	21,872	4,379	26,251	22,732	4,625	27,357	21,966	4,848	26,814
East South Central									
Kentucky	4,522	637	5,159	4,740	630	5,370	5,343	729	6,072
Tennessee	4,270	557	4,827	4,437	644	5,081	4,749	765	5,514
Alabama	3,120	459	3,579	3,424	523	3,947	3,869	780	4,649
Mississippi	4,537	302	4,839	4,695	292	4,987	5,316	481	5,797
	16,449	1,955	18,404	17,296	2,089	19,385	19,277	2,755	22,032
West South Central									
Arkansas	4,603	418	5,021	5,070	464	5,534	4,890	552	5,442
Louisiana	2,710	630	3,340	2,896	669	3,565	3,696	720	4,416
Oklahoma	3,593	437	4,030	3,228	474	3,702	3,471	550	4,021
Texas	12,005	1,775	13,780	11,205	1,847	13,052	10,538	2,010	12,548
	22,911	3,260	26,171	22,399	3,454	25,853	22,595	3,832	26,427
Mountain									
Montana	1,306	112	1,418	1,615	153	1,768	1,689	133	1,822
Idaho	1,455	236	1,691	1,455	225	1,680	1,670	169	1,839
Wyoming	537	91	628	490	93	583	512	93	605
Colorado	1,767	331	2,098	1,661	334	1,995	1,470	368	1,838
New Mexico	755	138	893	748	147	895	707	195	902
Arizona	629	153	782	656	204	860	567	200	767
Utah	662	162	824	682	175	857	632	167	799
Nevada	90	91	181	128	136	264	124	104	228
	7,201	1,314	8,515	7,435	1,467	8,902	7,371	1,429	8,800
Pacific									
Washington	1,207	359	1,566	1,324	472	1,796	1,282	565	1,847
Oregon	1,059	255	1,314	1,229	343	1,572	1,394	373	1,767
California	3,283	1,928	5,211	3,525	2,424	5,949	3,867	2,572	6,439
Alaska	22	16	38	16	9	25	9	8	17
Hawaii	50	44	94	57	54	111	53	107	160
	5,621	2,602	8,223	6,151	3,302	9,453	6,605	3,625	10,230
U.S. Government	495	1,831	2,326	13	1,403	1,416	7	725	732
Miscellaneous		545	545		432	432	11	1,350	1,361
TOTAL	153,782	29,462	183,244	154,864	31,335	186,199	157,492	34,634	192,076

RETAIL SALES OF WHEEL TRACTORS IN THE U. S.

Includes United States-Made and Imported Wheel Tractors
by Horsepower and Fuel Type
January – December 1962 - 1964

1962					1963				
Horsepower	Gasoline	Diesel	L-P Gas	Total	Horsepower	Gasoline	Diesel	L-P Gas	Total
9 - 34	17,987	5,887	226	24,100	9 - 34	26,561	3,368	383	30,312
35 - 44	26,131	17,662	300	44,093	35 - 39	12,939	16,560	19	29,518
45 - 59	39,219	14,225	2,192	55,636	40 - 49	25,356	11,402	1,327	38,085
60 - 74	8,675	21,756	2,392	32,823	50 - 59	15,397	17,071	1,197	33,665
75 - 89	4,420	18,220	3,035	25,675	60 - 79	9,886	14,970	2,397	27,253
90 & over		808	109	917	80 & over	2,843	21,845	2,922	27,610

1964				
Horsepower	Gasoline	Diesel	L-P Gas	Total
9 - 34	25,845	2,954	308	29,107
35 - 39	13,442	17,017	4	30,463
40 - 49	26,128	11,842	1,143	39,113
50 - 59	10,027	11,600	447	22,074
60 - 79	13,148	20,336	2,740	36,224
80 & over	3,595	28,221	3,279	35,095

NUMBER OF FARM EQUIPMENT DEALERS IN THE UNITED STATES AND CANADA BY STATE AND PROVINCE*

MARCH 15, 1965

STATE	NO. OF DEALERS
Alabama	240
Arizona	73
Arkansas	286
California	342
Colorado	246
Connecticut	48
Delaware	36
District of Columbia	2
Florida	161
Georgia	337
Idaho	171
Illinois	1,011
Indiana	620
Iowa	1,009
Kansas	657
Kentucky	380
Louisiana	189
Maine	86
Maryland	141
Massachusetts	62
Michigan	622
Minnesota	877
Mississippi	280
Missouri	622
Montana	236
Nebraska	546
Nevada	41
New Hampshire	30
New Jersey	99
New Mexico	87
New York	577
North Carolina	381
North Dakota	524
Ohio	708
Oklahoma	356
Oregon	150
Pennsylvania	596
Rhode Island	9
South Carolina	175
South Dakota	365
Tennessee	311
Texas	978
Utah	96
Vermont	75
Virginia	310
Washington	189
West Virginia	123
Wisconsin	724
Wyoming	100
Total	16,284

STATE	NO. OF DEALERS	
Alaska	5	
Hawaii	8	
Total		13
PROVINCES OF CANADA		
Alberta	615	
British Columbia	93	
Manitoba	400	
Ontario	587	
Quebec	367	
Saskatchewan	878	
New Brunswick	49	
Newfoundland	7	
Nova Scotia	50	
Prince Edward Island	24	
Total		3,070
Grand Total		19,367

* Duplications have been eliminated.

U.S. MANUFACTURERS' SHIPMENTS

Complete Units of selected farm machines & equipment

	1957-60 Average	1961	1962	1963	1964
PLOWS					
Moldboard plows:					
Tractor drawn, 1-way:					
1-bottom and 2-bottom	6,057	4,643	3,095	2,773	2,747
3-bottom	15,779	6,011	5,621	4,855	4,788
4-bottom	12,087	8,057	9,243	6,672	5,820
5-bottom and larger	3,031	3,166	2,920	3,215	3,884
Tractor-drawn 2-way:					
1-3 furrow and larger	871	116	59	145	104
Mounted, 1-way:					
1-bottom & 2-bottom	25,237	16,947	13,762	16,055	11,937
3-bottom	26,527	20,429	20,201	19,947	19,944
4-bottom and larger	12,167	16,134	20,430	26,376	38,025
Mounted, 2-way:	3,763	5,065	6,871	5,851	5,897
Disc plows, 1-way					
Drawn & mounted	NA	2,651	3,074	1,965	2,376
Disc plows, reversible, 2-way,					
Drawn & mounted	NA	1,776	1,019	689	766
One-way disc plows or tillers	5,583	3,259	3,098	4,164	2,574
Subsoilers (deep tillage)	6,913	3,092	5,149	3,436	2,870
HARROWS, ROLLERS, PULVERIZERS & STALK CUTTERS					
Harrows:					
Spike-tooth harrow sections	125,860	103,779	81,363	113,140	116,253
Spring-tooth harrow sections	77,282	63,040	66,980	62,523	75,848
Tine tooth harrow sections	NA	19,858	12,315	15,699	17,223
Disc harrows:					
Single (2 gang):					
Drawn	3,704	7,906	8,721	7,833	8,304
Mounted	3,446	1,613	1,969	2,614	2,953
Tandem (4 gang):					
Drawn:					
Wheel Type	54,460	48,271	53,316	58,068	63,368
Other	11,240	10,797	9,317	9,084	8,240
Mounted	23,500	10,985	12,068	11,324	15,171
Offset					
Drawn:					
Wheel type	5,089	3,989	4,902	5,307	7,506
Other	5,510	2,929	3,437	3,529	3,702
Mounted	2,560	1,638	2,850	2,440	4,312
Brush and bog	1,008	970	775	499	514
Other harrows	4,617	2,537	3,167	3,524	4,503
Soil pulverizers, packers, and land rollers	11,660	9,140	8,388	11,520	12,028
Stalk shredders and cutters or rotary mowers (power take-off):					
Flail	NA	3,312	4,966	7,277	9,185
Horizontal blade	NA	45,752	57,602	61,133	67,794
Blade terracers, or scrapers (farm size):					
Wheel type	3,766	2,135	2,124	2,610	2,457
Other	37,642	45,296	52,324	46,777	51,076
Land levelers	6,000	6,114	5,864	7,500	6,996
Wheel type folding drawbars	NA	9,099	11,503	15,759	16,058

U.S. MANUFACTURERS' SHIPMENTS

Complete Units of selected farm machines & equipment (Continued)

	1957-60 Average	1961	1962	1963	1964
PLANTING, SEEDING, AND FERTILIZING MACHINERY					
Corn planters:					
Drawn, semi-mounted, & mounted	50,238	27,835	29,802	27,839	41,935
Corn and cotton planters:					
Mounted	22,124	15,599	17,766	16,562	17,520
Grain drills, including legume planters:					
Fertilizer	10,914	5,629	6,635	5,610	5,485
Plain	12,840	8,600	10,130	D	D
Fertilizer distributors, drawn or mounted:					
Dry	27,798	37,663	31,357	36,663	40,838
Liquid	1,318	4,730	1,883	4,970	5,134
Manure spreaders	53,753	44,108	39,941	42,021	33,500
Loaders, manure and general utility (except beet and sugar cane loaders):					
Front and rear mounted	42,138	49,777	36,773	39,288	31,739
CULTIVATORS AND WEEDERS					
Corn and cotton type cultivators, mounted	70,143	50,995	50,878	55,657	56,822
Beet, bean and vegetable cultivators, drawn, mounted	3,559	1,669	1,396	1,724	1,530
Rotary hoe cultivator sections, drawn or mounted	78,528	65,896	72,706	65,904	73,270
Field cultivators drawn or mounted	8,307	12,627	12,877	14,491	20,382
Weeders, drawn or mounted	6,183	5,197	9,796	9,472	7,048
Rod weeders drawn or mounted	NA	5,197	9,796	9,472	7,048
SPRAYERS AND DUSTERS					
Power sprayers	76,065	57,053	50,615	66,969	66,782
Dusters:					
Power and traction	9,761	4,301	4,119	3,580	3,899
HARVESTING MACHINERY					
Combines:					
Pull type	18,332	6,203	5,288	4,727	5,420
Self-propelled	23,427	19,559	18,206	26,915	31,544
Corn heads	NA	NA	8,362	12,944	17,346
Windrowers or swathers	3,892	4,191	3,054	6,000	8,172
Corn pickers:					
Drawn or mounted	35,841	22,565	22,014	21,255	17,447
Field forage harvesters:					
Shear bar type (rigid knives or vertical combination):					
Basic machines:					
Engine drive	1,306	265	280	187	105
Power take-off	11,872	14,323	11,586	13,970	14,482
Pick-up hay unit	3,797	5,484	3,921	6,802	6,546
Cutter bar hay unit	5,132	2,601	2,927	2,063	2,112
Row crop unit	10,760	14,190	11,697	14,715	14,238
Flail type	12,579	8,337	11,402	6,474	8,781
Cotton strippers	2,895	4,160	4,483	3,737	2,561

U. S. MANUFACTURERS' SHIPMENTS

Complete Units of selected farm machines & equipment (Continued)

	1957-60 Average	1961	1962	1963	1964
HARVESTING MACHINERY (Continued)					
Cotton pickers	3,404	4,686	6,013	4,752	3,809
Potato diggers	1,236	474	715	NA	162
Potato harvesters	636	592	1,154	539	611
Beet harvesters	1,473	1,111	1,004	1,833	2,208
Peanut diggers, shakers, and windrowers	1,548	2,096	1,855	2,170	2,436
Peanut combines	1,602	1,908	1,818	1,970	2,455
HAYING MACHINERY					
Mowers, cutter-bar type:					
Drawn	13,961	10,001	7,188	13,920	11,963
Mounted and semi-mounted	66,094	49,480	45,927	48,569	46,983
Rakes:					
Side delivery	50,299	31,270	30,068	37,942	42,168
Pick-up hay balers:					
Wire:	6,437	5,270	4,597	4,777	6,486
Twine:	53,310	36,175	39,209	42,333	42,036
Bale throwing attachments	NA	NA	NA	7,779	6,102
Hay bale loaders (field type)	4,942	NA	3,332	2,518	2,233
Hay crushers and field hay conditioners	41,135	25,205	31,545	18,623	14,792
MACHINES FOR PREPARING CROPS FOR MARKET OR FOR USE					
Corn shellers, power:	4,005	2,885	2,535	1,645	912
Feed grinders and crushers, power (farm size)					
Hammer mills, with hammers only	9,066	6,242	7,566	7,395	6,522
All other	9,435	7,962	6,120	7,980	5,898
Feed mixers (farm size)	8,085	4,842	3,687	4,458	5,600
Combination grinder mixers	NA	5,587	16,982	15,616	12,156
Tobacco curers	6,989	10,672	9,850	16,869	16,402
Dryers, (grain, hay, and seed)					
Heated air crop dryers	5,813	1,825	2,319	4,761	4,790
Crop drying fans (over 15,000 CFM at approximately one inch pressure)	4,027	5,534	7,362	3,375	3,615
FARM POULTRY EQUIPMENT					
Incubators	33,560,797	28,931,961	22,825,109	26,461,068	24,048,175
Brooders, floor:					
Electric	84,170	43,598	36,766	38,537	29,605
Oil	18,638	4,530	8,188	3,543	1,724
Other	97,254	66,493	132,937	113,788	83,328
Brooders, battery	12,391	6,127	9,984	5,926	5,042
Nests	1,422,909	1,969,201	1,876,717	2,596,873	1,765,198
Laying cages	410,645	497,576	284,299	3,238,483	4,133,559
Poultry feeders:					
Trough	1,794,402	721,029	1,913,271	546,964	365,449
Hanging	1,134,374	513,038	939,253	659,538	681,569
Automatic	963,916	6,069,640	6,639,750	6,579,575	5,576,894

U.S. MANUFACTURERS' SHIPMENTS

Complete Units of selected farm machines & equipment (Continued)

	1957-60 Average	1961	1962	1963	1964
FARM POULTRY EQUIPMENT (Continued)					
Poultry waterers:					
Trough	874,609	2,297,066	2,831,613	2,631,765	2,313,116
Other	1,881,719	1,962,311	2,582,220	2,363,036	2,538,053
FARM DAIRY MACHINES AND EQUIPMENT					
Mechanical installations					
Pumping outfits; stationary and portable	30,244	31,751	26,878	25,316	24,005
Pail-type milking machines:					
Suspended units	48,350	21,269	30,846	16,332	13,140
Floor type	16,349	19,834	15,607	17,123	14,546
FARM ELEVATORS AND BLOWERS					
Farm elevators, portable:					
Single chain	21,544	23,286	22,612	22,372	24,103
Double chain	47,729	20,415	26,943	19,120	19,983
Auger type	124,299	109,267	99,757	104,792	110,056
Farm elevators, stationary	1,060	605	610	550	382
HOG EQUIPMENT AND OTHER BARN AND BARNYARD EQUIPMENT					
Silo unloaders, tower & horizontal	6,628	14,984	15,352	15,682	14,748
Animal stock tanks	137,491	155,042	138,812	175,558	N.A.
Livestock outside watering bowls	32,121	72,899	58,635	80,229	N.A.
Livestock water heaters	81,487	80,658	60,569	85,217	N.A.
Hog waterers	179,473	194,001	172,890	180,914	128,452
Hog feeders	191,500	238,696	198,495	277,711	299,511
FARM WAGONS, TRUCKS, AND OTHER FARM TRANSPORTATION EQUIPMENT					
Wagons and trucks (chassis only) and trailer gears:					
2-wheel	2,533	4,914	2,466	2,209	4,820
4-wheel	99,477	106,869	105,604	92,318	87,491
Boxes and racks for mounting on wagons, trucks, and trailer gears:					
Manual unloading or dump	35,698	24,188	20,810	26,240	24,926
Power unloading:					
Grain type	N.A.	12,350	12,887	11,356	9,544
Forage type		16,271	20,297	22,753	24,373

VALUE OF U.S. MANUFACTURERS' SHIPMENTS (EXCEPT TRACTORS)

Wholesale prices with $ 000,000 omitted

Product	1959	1960	1961	1962	1963	1964
			($ Million)			
Harvesting Machinery	$ 344	$ 324	$ 309	$ 319	$ 386	$ 439
Haying Machinery	164	140	124	126	132	135
Planting, Seeding & Fertilizing Machinery	111	98	96	105	112	129
Harrows, Rollers, Pulverizers & Stalk Cutters	103	86	83	98	115	128
Plows	77	61	63	65	77	88
Cultivators & Weeders	51	51	48	52	60	65
Sprayers & Dusters	45	45	41	46	49	48
Wagons, Trucks & Other Farm Transport Equipment	43	37	38	45	48	51
Barn Equipment	23	19	21	19	18	
Barnyard Equipment	34	25	37	44	49	
Other Barn and Barnyard Equipment						47[2]
Machines for Preparing Crops for Market or for other Use	41	38	50	44	53	48
Poultry Equipment	33	29	36	32	43	41
Elevators & Blowers	37	28	27	29	28	30
Dairy Machines & Equipment	22	20	29	24	17[1]	26
Hog Equipment	--	--	--	--	--	12[2]
Farm Machines & Equipment Total	*$1,130	$1,001	$1,002	$1,047	$1,186	$1,287

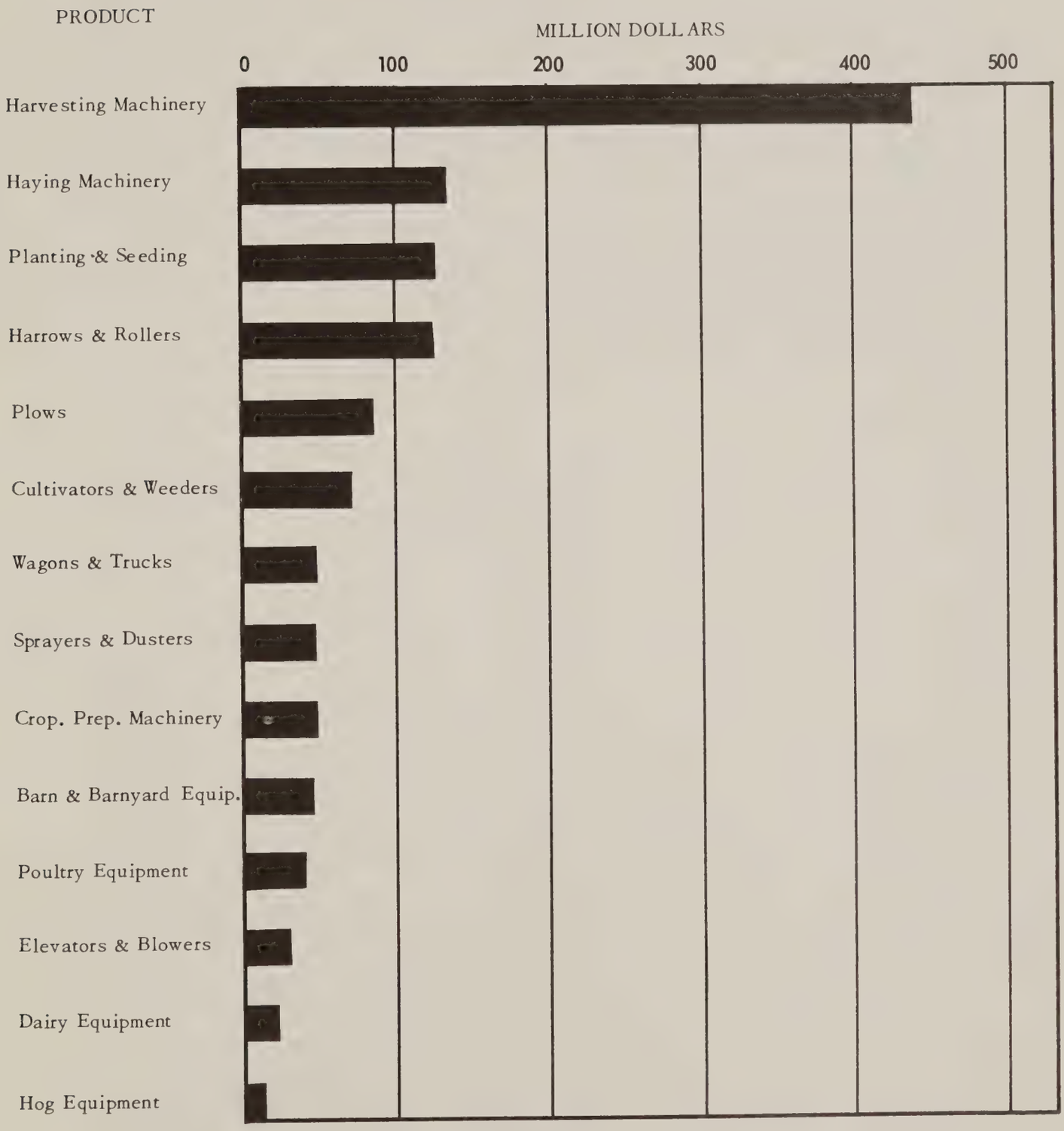
* Total domestic and export shipments of complete units, attachments and repair parts, at prices paid by wholesalers, f.o.b. factory. Columns do not add to totals shown because dollars have been rounded off for each item.

Source: U. S. Bureau of the Census Series M35A.

1. Data for pipeline milker units are excluded for 1963.

2. New Classification in 1964.

VALUE OF U.S. MANUFACTURERS' SHIPMENTS (EXCEPT TRACTORS) – 1964



U.S. WHEEL TRACTOR SHIPMENTS – FARM USE

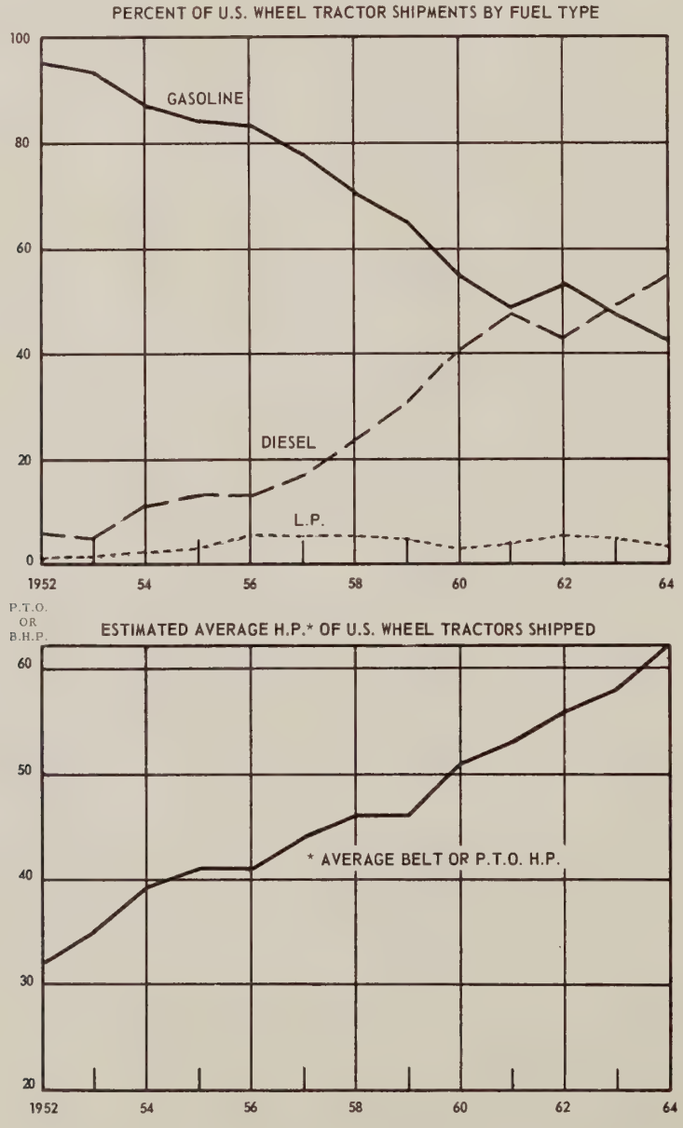
by

Fuel Type & Average Horsepower

Year	Total	Gasoline	Diesel	LP–Gas	Belt Horsepower**
		(No. of Tractors)			
1952*	414,560	391,111	23,449	NA	32
1953	390,385	363,451	21,708	5,226	35
1954	245,755	213,008	27,899	4,848	39
1955	330,141	277,105	41,506	11,530	41
1956	214,654	177,077	26,762	10,815	41
1957	229,050	179,142	37,352	12,556	44
1958	241,269	173,040	55,864	12,365	46
1959	259,916	167,961	79,548	12,407	46
1960	152,187	84,306	62,033	5,848	51
1961	171,417	84,102	80,920	6,395	53
1962	188,101	99,414	80,293	8,394	56
1963	203,449	96,108	.98,609	8,732	58
1964	213,221	90,004	115,439	7,778	62

*Production statistics by fuel type were collected in 1952 for the first time.

**Source: Farm Cost Situation, November 1964.



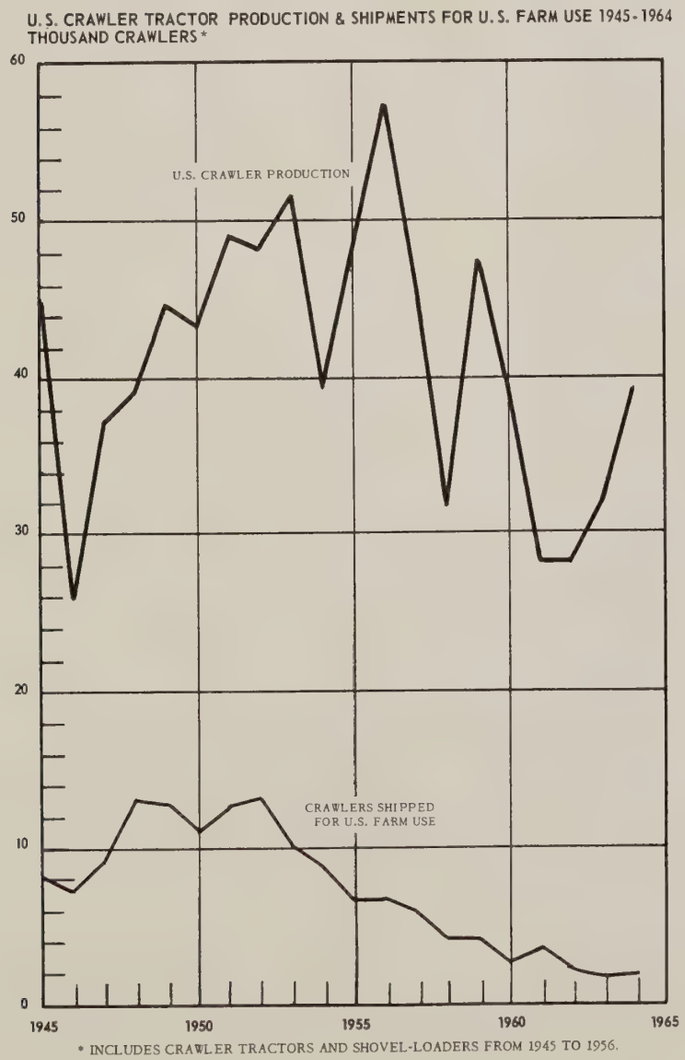
U.S. PRODUCTION AND SHIPMENTS OF CRAWLER TRACTORS, 1945–1964.

Year	Total Production	Shipments					
		Tractors*			Shovel–Loaders		
		Total	Domestic Industrial	Domestic Farm	Total	Domestic Industrial	Domestic Farm
		(No. of Crawlers)					
1945	44,872	43,998	39,404	7,977			
1950	43,680	44,600	29,167	10,714			
1955	46,973	48,891	31,036	6,449			
1956	57,611	55,417	34,461	6,408			
1957	45,268	32,863	19,355	5,833	8,466	NA	NA
1958	31,727	28,450	19,627	3,990	7,501	NA	NA
1959	47,650	34,112	24,584	4,000	10,488	NA	NA
1960	39,892	24,460	14,462	2,302	12,698	8,300	86
1961	28,097	20,068	12,422	2,749	8,857	5,053	62
1962	28,115	19,809	13,135	2,045	8,701	5,633	51
1963	32,050	22,567	12,925	1,894	11,503	7,104	37
1964	39,322	26,896	14,257	1,923	12,426	7,279 [1]	NA

* 1945-1956 Tractor data includes shovel-loaders.

Source: U.S. Bureau of the Census Series M35S.
NA – Not Available

1. Includes Domestic Farm Shovel-Loaders.



* INCLUDES CRAWLER TRACTORS AND SHOVEL-LOADERS FROM 1945 TO 1956.

TOTAL SHIPMENTS OF U.S. – MADE GARDEN TRACTORS AND MOTOR TILLERS

Year	Riding Tractors		Walking Tractors		Motor Tillers	
	Total	6 Engine HP & Over	Total	6 Engine HP & Over	Total	6 Engine HP & Over
			(No. of Units Shipped)			
1950	5,152	2,778	131,464	325	17,211	NA
1951	4,249	3,293	138,005	388	26,098	NA
1952	5,504	4,174	155,490	1,483	41,498	NA
1953	5,646	3,083	138,230	221	67,922	NA
1954	7,051	4,386	109,102	NA	75,082	NA
1955	9,090	4,595	86,819	NA	96,715	NA
1956	13,014	2,987	62,699	NA	127,518	NA
1957	10,164	4,794	41,846	2,581	129,796	NA
1958	12,643	6,217	39,940	6,508	174,490	NA
1959	27,047	NA	48,258	NA	251,778	659
1960	44,736	12,141	46,610	NA	325,109	NA
1961	67,124	33,139	45,689	NA	277,048	2,787
1962	85,576	59,305	63,878	NA	272,379	NA
1963	75,844	NA	29,998	NA	241,571	NA
1964	122,780	NA	62,317	NA	231,389	NA

Source: U.S. Bureau of the Census M35A

COMPANIES REPORTING SHIPMENTS TO INDUSTRIAL EQUIPMENT MANUFACTURERS COUNCIL

Company	1960	1961	1962	1963	1964	1965
Allis-Chalmers	X	X	X	X	X	X
Blackwelder	X	X	X	X	X	
E. L. Caldwell						X
Case	X	X	X	X	X	X
Clark Equip.					X	X
Cockshutt	X					
Danuser Machine	X	X	X	X	X	X
Deere	X	X	X	X	X	X
Drott	X	X	X	X		
Earth Eqpt. Co.	X					
Earthcavator						X
Edwards Eqpt.		X	X	X	X	
Ford	X	X	X	X	X	X
Gearmatic						X
Harlo	X	X	X	X	X	X
Henry	X	X	X	X	X	X
Hydraulic Tool & Eqpt.	X					
International Harvester	X	X	X	X	X	X
K-D	X	X	X	X	X	X
Kim			X	X		
Lilliston						X
Massey-Ferguson	X	X	X	X	X	X
New Idea	X					
Oliver	X	X	X	X	X	X
Orendorff			X	X	X	X
Ottawa	X					
Pacific Car & Foundry			X	X	X	
Parsons (Koehring)	X	X	X	X	X	X
Superior Pipe Spec. Co.	X	X	X	X	X	X
Tractor-Mate	X	X	X	X		
Triumph			X	X	X	X
Wagner	X	X	X	X		
Wain-Roy	X	X	X	X		X
Total	23	19	23	23	19	21

INDUSTRIAL WHEEL & CRAWLER TRACTORS

U.S. Manufacturers' shipments of tractors for nonfarm use.

Tractor Type and Horsepower	1960	1961	1962	1963	1964
QUANTITY OF SHIPMENTS	UNITS				
Total Wheel 1/ Type	21,032	22,443	23,081	28,712	27,580
Under 35 PTO HP	7,538	6,441	5,405	7,617	4,900
35 & Under 40 PTO HP	5,263	7,181	6,635	NA	6,974
40 & Under 45 PTO HP	NA	3,351	4,270	NA	5,975
45 & Under 50 PTO HP	953	1,990	3,739	4,222	5,112
50 & Under 55 PTO HP	2,849	2,526	1,967	1,037	1,470
55 & Under 60 PTO HP	NA	192		NA	NA
60 & Under 70 PTO HP	NA	556	543	NA	NA
70 & Over PTO HP	350	206	522	NA	1,660
Crawler Tractors Under 60 NEHP*	NA	4,016	4,465	5,306	5,449
VALUE OF SHIPMENTS 2/	DOLLARS (000)				
Total Wheel 1/ Type (Complete Units)	36,258	42,463	49,660	65,463	67,098
Under 35 PTO HP	8,923	7,710	7,843	12,391	7,389
35 & Under 40 PTO HP	8,778	13,074	13,515	NA	16,929
40 & Under 45 PTO HP	NA	7,475	9,129	NA	13,375
45 & Under 50 PTO HP	2,059	4,612	8,684	10,148	13,375
50 & Under 55 PTO HP	5,730	5,277	4,418	2,355	3,924
55 & Under 60 PTO HP	NA	483		NA	NA
60 & Under 70 PTO HP	NA	1,678	1,690	NA	NA
70 & Over PTO HP	2,153	2,154	4,381	NA	7,428
Crawler Tractors Under 60 NEHP*	NA	12,894	16,308	20,879	20,741

1/ Except garden, and contractors' off-highway type.
2/ At prices paid by wholesalers, f.o.b. factory.

Source: U.S. Bureau of the Census M35S.

* NEHP – Net engine horsepower.

INDUSTRIAL EQUIPMENT FOR MOUNTING ON TRACTORS

Number of Units Shipped by Companies Reporting to
Industrial Equipment Manufacturers' Council

Shipments	Quantity of Total Domestic and Export Shipments				
	1960	1961	1962	1963	1964
			(No. of Units)		
LOADERS (except loaders for farm use)					
For Wheel Type Tractors (except rear engine)	20,779	16,442	21,247	24,303	24,277
Under 2,000 lbs. lifting capacity	9,901	4,187	4,596	4,290	3,590
2,000 lbs. & under 3,000 lbs.	10,481	10,727	14,605	16,226	14,534
3,000 lbs. & over	397	1,528	2,046	3,787	5,035
For Crawler Tractors under 60 NEHP	5,245	4,662	3,679	4,133	4,581
BACKHOES					
For Wheel Type Tractors	7,202	6,009	9,175	12,275	14,008
Under 11 ft. maximum digging depth	796	351	746	808	952
11 ft. & under 13 ft.	3,234	2,335	2,964	4,964	3,950
13 ft. & over	3,172	3,323	5,465	6,503	9,106
For Crawler Tractors under 60 NEHP	1,350	1,256	1,433	1,426	1,764
FORKLIFTS					
For Wheel Type Tractors	1,655	1,951	2,088	1,576	2,698
Under 4,000 lbs. lifting capacity	570	766	833	561	640
4,000 lbs. & over	1,085	1,185	1,255	1,015	2,058
FRONT MOUNTED DOZER & ANGLE DOZERS					
For Wheel Type Tractors	3,091	4,156	1,730	1,150	3,423
For Crawler Tractors Under 60 NEHP	3,197	4,296	4,201	4,192	5,585
REAR MOUNTED BLADES	NA	12,964	10,501	6,929	11,449
REAR MOUNTED SCARIFIERS, RIPPERS & SCARIFIER ATTACHMENTS		1,124	818	1,450	NA
REAR MOUNTED SCRAPERS, ROLLOVER & BOX		626	899	837	1,302
INDUSTRIAL MOWERS					
Side mounted, cutter bar type			3,285	2,549	3,016
Horizontal blade rotary cutters			7,840	9,299	9,024
Flail type, vertical knives, no spout			2,134	3,343	NA
RAKES, BROOMS & SWEEPERS			NA	NA	136
WINCHES, TRACTOR MOUNTED			1,684	1,737	1,709

INDUSTRIAL EQUIPMENT FOR MOUNTING ON TRACTORS

Value of Shipments by Companies Reporting to Industrial Equipment Manufacturer's Council in Wholesale Dollars, F.O.B. Factory

Shipments	Value of Total Domestic and Export Shipments				
	1960	1961	1962	1964	1964
			($ Thousand)		
LOADERS (except loaders for farm use)					
For Wheel Type Tractors (except rear engine)	11,407	9,524	13,487	16,423	18,276
Under 2,000 lbs. lifting capacity	4,552	2,031	2,219	2,233	2,313
2,000 lbs. & under 3,000 lbs.	6,402	6,214	9,358	11,108	10,102
3,000 lbs. & over	452	1,279	1,909	3,082	4,244
For Crawler Tractors under 60 NEHP	7,530	6,976	7,208	8,769	9,601
BACKHOES					
For Wheel Type Tractors	12,223	11,450	18,331	24,228	28,873
Under 11 ft. maximum digging depth	1,167	645	1,220	1,144	1,557
11 ft. & under 13 ft.	5,226	4,335	6,095	10,323	8,454
13 ft. & over	5,830	6,469	11,016	12,761	9,106
For Crawler Tractors under 60 NEHP	2,619	2,677	2,988	2,798	3,625
FORKLIFTS					
For Wheel Type Tractors	2,227	2,068	2,181	1,889	4,178
Under 4,000 lbs. lifting capacity	518	307	366	232	325
4,000 lbs. & over	1,709	1,761	1,815	NA	3,853
FRONT MOUNTED DOZER & ANGLEDOZERS					
For Wheel Type Tractors	294	384	148	103	495
For Crawler Tractors under 60 NEHP	2,091	3,028	3,091	3,270	4,229
REAR MOUNTED BLADES		1,430	1,526	885	1,416
REAR MOUNTED SCARIFIERS, RIPPERS & SCARIFIER ATTACHMENTS		394	246	510	NA
REAR MOUNTED SCRAPERS, ROLLOVER & BOX			217	191	379
INDUSTRIAL MOWERS					
Side mounted, cutter bar type			1,193	1,143	1,790
Horizontal blade rotary cutters			2,335	2,595	2,787
Flail type, vertical knives, no spout			764	1,166	NA
RAKES, BROOMS & SWEEPERS			NA	NA	28
WINCHES, TRACTOR MOUNTED			871	1,022	1,017

TOTAL GROSS CASH INCOME FROM FARM AND NONFARM SOURCES

In Millions of Dollars

Year	Livestock (1)	Crops	Government Payments (2)	Total From Farm Sources	Nonfarm Sources (3)	Total Gross All Sources
1935	$ 4,143	$ 2,977	$ 573	$ 7,693	$ 2,283	$ 9,976
1940	4,913	3,469	723	9,105	2,714	11,819
1945	12,008	9,655	742	22,405	4,195	26,600
1950	16,102	12,410	283	28,795	6,045	34,840
1951	19,634	13,324	286	33,244	6,329	39,573
1952	18,252	14,380	274	32,906	6,553	39,459
1953	16,933	14,193	213	31,339	7,271	37,610
1954	16,284	13,669	257	30,210	5,850	36,060
1955	15,880	13,676	229	29,785	6,140	35,925
1956	16,312	14,252	553	31,117	6,565	37,682
1957	17,363	12,461	1,016	30,840	6,649	37,489
1958	19,223	14,182	1,089	34,494	6,712	41,206
1959	18,856	14,656	682	34,194	7,143	41,337
1960	18,909	15,103	693	34,705	7,242	41,947
1961	19,391	15,495	1,484	36,370	7,040	43,410
1962	19,986	15,935	1,736	37,657	7,100	44,757
1963	19,926	17,327	1,686	38,939	6,800	45,739
1964	19,764	17,135	2,169	39,068	6,757	45,825

Source: United States Department of Agriculture, Farm Income Situation July, 1965

(1) Includes livestock products marketed.

(2) Represents all money paid directly to farmers under the Soil Bank, Agricultural Conservation, and Wool Incentive Program. Indirect aid through the price support programs are not included.

(3) Represents all income received by farm residents from nonfarm sources such as wages and salaries from nonfarm employment, nonfarm business and professional income, rents from nonfarm real estate, dividends, interest and social security payments.

GROSS CAPITAL EXPENDITURES BY FARMERS

In Million Dollars

Year	Tractors	Trucks	Machinery & Equipment	Total	Service Buildings	All (1) Others	Total
1930	$115	$ 54	$ 236	$ 405	$ 86	$ 226	$ 312
1935	117	73	161	351	56	153	209
1940	197	81	241	519	108	245	353
1945	276	94	714	1,084	249	200	449
1950	769	520	1,279	2,568	841	1,185	2,026
1951	807	481	1,383	2,671	897	1,257	2,154
1952	755	396	1,368	2,519	1,008	1,169	2,177
1953	722	437	1,225	2,384	965	1,436	2,401
1954	570	452	1,120	2,142	896	1,192	2,088
1955	689	406	1,099	2,194	872	1,163	2,035
1956	525	432	998	1,955	842	1,066	1,908
1957	522	488	976	1,986	840	1,129	1,969
1958	677	500	1,328	2,505	796	1,143	1,939
1959	777	484	1,376	2,637	829	1,090	1,919
1960	482	469	1,254	2,205	797	1,040	1,837
1961	566	480	1,236	2,282	837	1,192	2,029
1962	667	465	1,371	2,503	874	1,245	2,119
1963	749	372	1,692	2,813	779	1,090	4,682
1964	785	374	1,890	3,049	764	1,083	4,896

Source: United States Department of Agriculture, Farm Income Situation July 1965.

(1) Includes capital expenditures on farm operators dwelling and for farm share of automobiles purchased – 40% of total.

TRENDS IN FARM ACREAGE AND YIELDS

Year	Total Acres of Cropland Harvested (Million)	Index 1957 – 59 = 100	
		Crop Yield Per Acre	Livestock Production Per Breeding Unit
1930	369	64	70
1935	345	66	69
1940	341	76	75
1945	354	82	79
1950	345	84	86
1951	344	85	89
1952	349	90	89
1953	348	80	93
1954	346	88	92
1955	340	91	93
1956	324	92	95
1957	324	93	96
1958	324	105	100
1959	324	102	104
1960	324	109	105
1961	304	113	108
1962	295	116	108
1963	300	119	111
1964(1)	301	116	112

(1) Preliminary

Source: United States Department of Agriculture, Changes in Production & Efficiency – 1965.

TRENDS IN PRODUCTION EFFICIENCY IN AGRICULTURE

Index 1957 - 59 = 100

Year	Farm Production			Man-Hours of Labor	Production Per Man-Hour		
	All	Livestock	Crops		All	Livestock	Crops
1930	61	64	69	216	28	47	27
1935	61	59	70	198	31	44	31
1940	70	71	78	192	36	50	37
1945	81	86	85	177	46	58	46
1950	86	88	89	142	61	68	63
1951	89	92	91	143	62	72	61
1952	92	92	95	136	68	74	67
1953	93	93	94	131	71	76	69
1954	93	96	93	125	74	80	73
1955	96	99	96	120	80	85	77
1956	97	99	95	113	86	89	83
1957	95	97	93	104	91	92	90
1958	102	99	104	99	103	100	105
1959	103	104	103	97	106	108	105
1960	106	102	108	92	115	113	114
1961	107	106	107	89	120	120	119
1962	108	107	108	85	127	127	124
1963	112	111	112	83	135	137	132
1964(1)	111	113	109	79	141	147	135

Source: United States Department of Agriculture, Changes in Farm Production & Efficiency 1965.

(1) Preliminary.

PRODUCTIVITY OF FARM WORKERS, FARM AND NONFARM POPULATION

Year	Number of (1) Farm Workers (Million)	Number of Persons supplied by each farm worker	Population (Million)			
			Farm	Nonfarm	Total	Farm as % of Total
1935	12.7	--	32.2	95.1	127.3	25.3
1940	11.0	10.69	30.5	101.6	132.1	23.1
1945	10.0	14.55	24.4	115.5	139.9	17.5
1950	9.9	15.47	23.0	128.6	151.7	15.2
1951	9.5	15.77	21.9	132.5	154.4	14.2
1952	9.1	16.40	21.7	135.3	157.0	13.8
1953	8.9	17.39	19.9	139.8	159.6	12.4
1954	8.6	18.10	19.0	143.4	162.4	11.7
1955	8.4	19.48	19.1	146.2	165.3	11.5
1956	7.8	21.72	18.7	149.5	168.2	11.1
1957	7.6	22.75	17.7	153.5	171.2	10.3
1958	7.5	23.21	17.1	156.9	174.1	9.8
1959	7.4	24.51	16.6	160.5	177.1	9.4
1960	7.1	25.85	15.6	164.3	179.9	8.7
1961	6.9	27.83	14.8	168.2	182.9	8.1
1962	6.7	28.57	14.3	171.5	185.8	7.7
1963	6.5	30.75	13.4	175.3	188.7	7.1
1964(2)	6.1	33.25	12.9	178.3	191.3	6.8

Source: United States Department of Agriculture, Changes in Farm Production and Efficiency - A Summary Report 1965.

(1) Represents the average number engaged in agriculture during the year. Includes farm operators and family workers as well as hired workers.

(2) Preliminary.

HORSEPOWER PER FARM, FARM OUTPUT AND MAN HOURS OF FARM WORK

Year	Tractor Horsepower Per Farm		Farm Output Per Man Hour Index		Man Hours of Farm Work	
	Number	Index 1957=100	1957-'59 =100	1957=100	(Millions)	Index 1957=100
1957	32.40	100.00	91	100.0	11,059	100.0
1958	34.93	107.81	103	113.2	10,548	95.4
1959	37.64	116.17	106	116.5	10,301	93.1
1960	40.33	124.47	115	126.4	9,825	88.8
1961	43.16	133.21	120	131.9	9,473	85.7
1962	45.78	141.30	127	139.6	9,085	82.2
1963	46.96	144.94	134	147.3	8,704	78.7
1964	52.37	161.6	141	154.9	8,426	76.2
1965(1)	56.27	173.7	149	163.7	8,273	74.8

(1) Preliminary.

Source: United States Department of Agriculture, Farm Cost Situation - November, 1965.

PRODUCTION ASSETS USED IN AGRICULTURE, JANUARY 1, SPECIFIED YEARS AND 1950– 1965[1]

Billions of Dollars

Year	Farm real Estate[2]	Live-stock[3]	Machinery and Motor Vehicles[4]	Other[5]	Total[6]
1940	27.9	3.9	3.8	2.2	37.7
1945	45.5	8.0	6.9	5.1	65.6
1950	64.6	12.4	11.2	6.7	95.0
1951	75.0	16.7	12.6	7.0	111.3
1952	82.5	19.2	14.6	7.3	123.6
1953	83.6	14.5	15.2	7.2	120.5
1954	82.9	11.5	15.8	7.0	117.1
1955	85.8	11.0	15.8	7.4	120.0
1956	90.9	10.4	16.5	7.2	125.0
1957	98.0	10.7	17.2	7.4	133.3
1958	102.6	13.6	17.4	7.1	140.6
1959	110.3	17.3	18.6	7.6	153.9
1960	116.0	15.2	19.2	7.1	157.5
1961	117.5	15.5	18.7	6.6	158.4
1962	123.5	16.4	19.0	6.6	165.4
1963	128.8	17.2	19.4	6.7	172.1
1964	136.4	15.7	20.0	7.0	179.1
1965[7]	144.3	14.4	20.9	6.6	186.1

1 48 States. Revised
2 Farmland and service buildings, excluding operators' dwellings, as of March 1.
3 Excludes horses and mules.
4 Includes horses and mules through 1960. Includes 40 percent of the value of automobiles. Beginning in 1950, a small but increasing proportion of the value of motortrucks was allocated to farm household use.
5 Includes one-half of the January 1 inventory value of feed crops, hay, and forage stored on farms (excluding CCC loans), and working capital needed to meet farm production expenses.
6 Detail may not add to total because of rounding.
7 Preliminary.
Source: Balance Sheet of Agriculture - 1965, U.S.D.A. Bulletin #290.

AVERAGE VALUE OF PRODUCTION ASSETS PER FARM – CURRENT PRICES JAN. 1, SPECIFIED YEARS 1950-64[1]

Assets Per Farm
In Dollars

Year	Farm real Estate[2]	Livestock[3]	Machinery and motor Vehicles[4]	Other[5]	Total
1940	4,608	608	591	351	6,158
1945	7,783	1,343	1,157	861	11,144
1950	12,003	2,199	1,983	1,193	17,378
1955	18,814	2,357	3,402	1,592	26,165
1956	20,904	2,299	3,657	1,596	28,456
1957	23,734	2,456	3,930	1,685	31,805
1958	26,202	3,206	4,104	1,672	35,184
1959	29,783	4,221	4,540	1,856	40,400
1960	32,480	3,850	4,870	1,799	42,999
1961	34,097	4,077	4,906	1,739	44,819
1962	37,007	4,436	5,141	1,796	48,380
1963	39,849	4,816	5,433	1,868	51,966
1964	43,402	4,534	5,751	2,013	55,700

1 48 States, Revised.
2 Farmland and service buildings, excluding operators' dwellings, as of March 1.
3 Excludes horses and mules.
4 Includes horses and mules through 1960. Includes 40 percent of value of automobiles. Beginning in 1950, a small but increasing proportion of the value of motortrucks was allocated to farm household use.
5 Includes one-half of January 1 inventory value of feed crops, hay and forage stored on farms (excluding CCC loans), and working capital needed to meet farm production expenses.
Source: Balance Sheet of Agriculture – 1965 U.S.D.A. Bulletin #290.

AGRICULTURAL EQUIPMENT INDUSTRY IN CANADA

Canada shares with the United States a unique situation with regard to the farm equipment industry; that is the free movement of farm machinery between the two countries. This has helped the development of a competitive interchange of products that benefits farmers of both Canada and the United States.

Canadian agriculture appears to have a future similar to that of agriculture in the U.S., with a continuing trend toward larger capital investment, fewer farm workers and greater total farm output. Along with the steady increase in output per farm worker, there has been a decrease in the number of farm workers and in the number of farms. From 1951 to 1961 the number of farms decreased 16%.

The increase in output per farm worker and total farm output has in great measure resulted from improved fertilizers, better farming practices, and stepped-up use of farm machinery. Between the two census years, 1951-1961, the number of tractors on farms increased 38%, combines increased 61% and the value of all farm machines increased 34%.

There appears to be a well established relationship between the income from the sale of products by Canadian farmers and the investment in farm machines. For each $100 in income from the sale of farm products Canadian farmers have been investing approximately $10 in agricultural equipment.

Farm cash income and supplementary payments totaled $3,464 million in 1964 and sales of farm machines for 1964 were estimated at $380 million.

Farm machinery products manufactured in Canada in 1955 were valued at $114 million. In 1961 this had risen to $138 million.

Canadian farm machinery exports to the U.S. in 1964 were valued at $128 million and imports from the U.S. were valued at $284 million.

Data relating to Canadian farm machine sales are provided in the following tables. Dollar amounts, calculated at wholesale prices to dealers, represent dealer-sales to farmers.

ESTIMATED DEALER SALES TO USERS VALUED AT WHOLESALE PRICES FOR FARM IMPLEMENTS AND EQUIPMENT, BY PROVINCES, 1963 AND 1964 COMPARED

PROVINCES	Total All Machines (Including repair parts)			Repair Parts		
	1963 ($ 000)	1964 ($ 000)	% Change	1963 ($ 000)	1964 ($ 000)	% Change
CANADA	337,562	380,132	12.6	49,721	53,156	6.9
ATLANTIC PROV.	8,186	9,789	19.6	1,473	1,745	18.5
QUEBEC	41,251	39,439	4.4	6,187	6,806	10.0
ONTARIO	70,304	81,124	15.4	10,535	11,739	11.4
MANITOBA	41,570	51,108	22.9	5,653	5,878	4.0
SASKATCHEWAN	96,618	110,985	14.9	13,952	14,619	47.8
ALBERTA	72,338	78,884	9.0	10,408	10,735	31.4
BR. COLUMBIA	7,296	8,803	20.6	1,512	1,634	8.1

Source: Dominion Bureau of Statistics, Canada.

NOTE: Canadian Dollars unadjusted for exchange valuation.

FARM IMPLEMENT & EQUIPMENT SALES TO USERS VALUED AT WHOLESALE PRICES

(Including Repair Parts)

BY PROVINCES, CANADA – 1957 - 1964

PROVINCES	1957 ($ 000)	1958 ($ 000)	1959 ($ 000)	1960 ($ 000)	1961 ($ 000)	1962 ($ 000)	1963 ($ 000)	1964 ($ 000)
CANADA	183,722	205,993	251,119	258,778	241,420	282,677	337,562	380,132
ATLANTIC PROVS.	6,369	6,898	7,692	9,069	9,713	8,244	8,186	9,789
QUEBEC	27,955	30,455	31,688	31,538	35,369	38,084	41,251	39,439
ONTARIO	46,152	50,060	58,611	58,175	60,131	60,517	70,304	81,124
MANITOBA	18,699	21,530	28,572	31,025	23,233	33,140	41,570	51,108
SASKATCHEWAN	41,568	46,421	61,397	69,052	51,542	70,751	96,618	110,985
ALBERTA	38,214	45,505	56,427	53,335	54,119	64,714	72,338	78,884
BR. COLUMBIA	4,764	5,124	6,732	6,584	7,313	7,227	7,296	8,803

NOTE: Canadian Dollars unadjusted for exchange valuation.

TRACTOR SALES - UNITS

SPECIAL STATEMENT - DOMINION BUREAU OF STATISTICS, OTTAWA

1964 - PRELIMINARY

Item	Canada	Atl. Prov.	Que.	Ont.	Man.	Sask.	Alta.	B.C.
1. Tractors - Farm Use:								
Wheel type - 100% corrected belt h.p.								
9 to 34 h.p.- Diesel	478	66	180	119	(D)	10	(D)	83
Other	2,118	342	623	739	73	82	110	149
35 to 39 h.p.- Diesel	4,562	309	1,420	1,908	205	111	264	345
Other	1,333	152	513	447	63	43	60	55
40 to 49 h.p.- Diesel	873	34	190	520	43	(D)	(D)	37
Other	1,862	84	396	694	165	210	246	67
50 to 59 h.p.- Diesel	4,120	175	549	1,405	603	739	536	113
Other	797	(D)	(D)	196	109	241	211	12
60 to 79 h.p.- Diesel	4,994	22	64	533	989	2,287	1,061	38
Other	684	(D)	26	96	80	268	204	(D)
80 h.p. and over - Diesel	5,512	(D)	43	150	849	2,870	1,577	(D)
Other	173	-	(D)	32	(D)	(D)	90	-
Totals	27,506	1,197	4,028	6,839	3,201	6,918	4,396	927
Crawler type - 100% drawbar h.p.								
Under 35 h.p.	170	(D)	58	31	20	(D)	(D)	(D)
Industrial use - Wheel type: 100% corrected belt, h.p.								
9 to 29 h.p. - Diesel	9	(D)	(D)	(D)	(D)	-	-	-
Other	16	-	(D)	7	(D)	(D)	(D)	(D)
30 to 34 h.p. - Diesel	7	-	(D)	(D)	-	-	-	-
Other	493	28	94	196	43	32	57	43
35 to 39 h.p. - Diesel	156	25	27	68	(D)	(D)	12	15
Other	205	18	28	93	13	22	16	15
40 to 49 h.p. - Diesel	289	7	56	132	11	7	37	39
Other	547	38	106	214	44	44	54	47
50 to 59 h.p. - Diesel	266	31	98	85	9	7	9	27
Other	30	9	4	5	5	(D)	(D)	-
60 h.p. and over - Diesel	89	(D)	33	24	-	15	11	(D)
Other	9	(D)	-	(D)	-	(D)	(D)	-
Totals	2,116	161	453	834	136	136	204	192
Crawler type - 100% drawbar h.p.								
Under 35 h.p.	831	202	222	240	26	21	27	93

(D) To prevent disclosure of individual company operations.

FARM IMPLEMENT AND EQUIPMENT SALES - UNITS

SPECIAL STATEMENT - (Continued)

Item	Canada	Alt. Prov.	Que.	Ont.	Man.	Sask.	Alta.	B.C.
2. Combines -								
Pull type	2,580	53	48	334	500	1,158	474	13
Self-propelled	7,194	76	264	931	1,272	2,645	1,926	80
3. Automatic hay balers:								
Power take-off driven	11,873	651	2,409	2,889	1,385	1,927	2,245	367
Engine driven	154	25	37	(D)	14	(D)	35	22
Total hay balers	12,027	676	2,446	(D)	1,399	(D)	2,280	389
4. Diskers - Under 15 ft.	2,200	-	-	(D)	466	1,318	386	(D)
15 ft. and over	4,341	-	(D)	(D)	831	3,097	392	(D)
5. Heavy duty deep tillage type cultivators	9,125	(D)	(D)	82	2,143	4,507	(D)	(D)
6. Swathers and windrowers:								
Tractor-drawn	5,644	(D)	-	(D)	1,330	2,836	1,434	37
Self-propelled	4,195	5	103	482	901	1,244	1,328	132

D - To prevent disclosure of individual company operations.

FARM IMPLEMENT AND EQUIPMENT SALES TO USERS VALUED AT WHOLESALE PRICES, BY MAJOR GROUPS, CANADA

Major Groups	1959 ($ 000)	1960 ($ 000)	1961 ($ 000)	1962 ($ 000)	1963 ($ 000)	1964 ($ 000)
Total, All Groups	212,232	217,465	201,777	238,797	287,797	326,976
Tractors & Engines	78,938	80,093	74,764	80,631	97,678	114,067
Plows	11,189	11,635	11,460	10,969	12,934	15,878
Tilling, Cultivating & Weeding Machinery	11,920	12,650	12,939	15,363	18,050	21,106
Planting, Fertilizing & Seeding Machinery	7,894	7,873	8,224	9,477	11,380	14,447
Haying Machinery	30,655	30,544	29,298	32,214	31,425	30,867
Harvesting Machinery	44,122	46,485	37,631	57,626	78,182	85,644
Machines for preparing crops for market use	7,510	6,262	6,233	7,658	10,043	11,313
Farm Wagons, Wagon trucks & sleighs	1,994	2,025	1,900	1,770	2,610	3,571
Barn Equipment	3,869	4,095	4,535	5,892	6,289	7,268
Dairy Machinery & Equipment	5,139	5,766	5,589	5,621	4,993	9,342
Spraying & Dusting Equipment	1,467	1,637	1,758	1,828	2,271	2,439
Miscellaneous Farm Equipment	7,535	8,400	7,436	9,748	11,984	11,034

Source: Dominion Bureau of Statistics.

DEALERS' SALES TO USERS VALUED AT WHOLESALE PRICES - 1964

	Total all farm machines	Farm-use tractors(1)	Industrial-use tractors(2)	Repair parts(1)
		($ 000)		
Canada	380,132	27,506	2,116	53,156
Atlantic Provinces	9,789	1,197	161	1,745
Quebec	39,439	4,028	453	6,806
Ontario	81,124	6,839	834	11,739
Manitoba	51,108	3,201	136	5,878
Saskatchewan	110,985	6,918	136	14,619
Alberta	78,884	4,396	204	10,735
British Columbia	8,803	927	192	1,634

(1) Included in Col. 1. Does not include Crawler Tractors under 35 h.p.
(2) Excluded from Col. 1.

POPULATION OF SPECIFIED MACHINES ON FARMS BY PROVINCE – CANADA

Census of Agriculture – 1961

	Canada	Atlantic Prov.	Quebec	Ontario	Manitoba	Sask.	Alberta	British Columbia
Automobiles	357,951	18,526	55,385	110,773	34,619	72,152	52,167	14,322
Motor Trucks	302,012	14,590	26,597	62,812	31,806	82,669	71,508	12,004
Tractors (Wheel & Crawler)	549,789	21,351	70,697	150,046	61,463	126,613	102,624	16,974
Grain Combines	155,611	1,570	3,046	22,387	23,662	65,084	38,530	1,331
Swathers	96,154	N.A.	N.A.	N.A.	20,408	47,489	27,805	452
Hay Balers	89,522	4,081	13,212	28,061	8,573	17,283	15,632	2,679
Forage Harvesters	16,764	396	1,551	8,945	1,175	1,429	2,059	1,208
Milking Machines	106,119	6,553	34,724	44,284	4,013	3,940	9,238	3,365
Electric Milk Coolers	32,013	2,958	16,647	9,148	759	638	480	1,383
Electric Motors (1/3 h.p. & over)	444,507	17,082	72,519	140,028	49,884	75,144	76,950	12,898

$ Value of Farm Capital								
$ Value of Machinery & Equipment (000's)	1 2,568,632	91,735	301,257	579,282	272,019	686,826	550,875	86,488
$ Value of Livestock & Poultry (000's)	1 1,979,949	62,566	308,941	590,012	162,457	321,010	451,254	77,648
$ Value of Land & Buildings.	1 8,622,641	250,885	1,014,682	2,572,302	719,612	1,856,523	1,715,367	493,031
Total $ Value of Farm Capital	1 13,171,222	411,186	1,624,880	3,741,596	1,154,088	2,864,359	2,717,496	657,167

1 Includes data for Yukon and Northwest Territories.

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